

**SOLID STATE DEVICES, INC.**

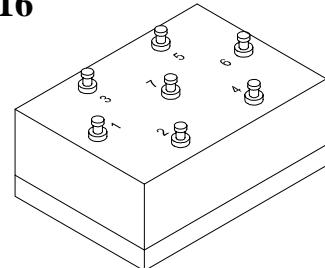
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**Designer's Data Sheet****FEATURES:**

- Ultra Fast Recovery: 150 nsec Maximum
- 2000 V Blocking Voltage
- 5000 V Dielectric Voltage
- Average Output Current 10 Amps
- Low Reverse Leakage Current
- Glass Passivated Rectifiers
- Hermetically Sealed Discretes
- Aluminum Base for Maximum Thermal Conductivity
- TX and TXV Level Screening Available

**SPA516-2F**

**10 AMPS  
 150 nsec  
 FAST RECOVERY  
 DUAL SINGLE PHASE  
 BRIDGE ASSEMBLY**

**SPA516**

Maximum Ratings	SYMBOL	VALUE	UNITS
<b>Peak Repetitive Reverse and DC Blocking Voltage</b>	$V_{RRM}$ $V_{RWM}$ $V_R$	2000	Volts
<b>Average Rectified Forward Current</b> (Resistive load, 60Hz, Sine Wave)	$I_o$	10 4	Amps
<b>Peak Surge Current</b> (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ C$ , per leg)	$I_{FSM}$	75	Amps
<b>Operating and Storage Temperature Junction Temperature</b>	$T_{OP} \& T_{stg}$ $T_J$	-55 TO +150 -55 TO +175	°C
<b>Maximum Thermal Resistance</b> Junction to Case (per Assebly) Junction to Case (per Leg)	$\theta_{JC}$	1.125 9.0	°C/W

Electrical Characteristics <sup>1/</sup> (per leg)	SYMBOL	VALUE	UNITS
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 3A$ , 300 - 500 $\mu$ sec pulse)	$V_{F1}$	4.4	Vdc
<b>Reverse Leakage Current</b> (Rated $V_R$ , 300 $\mu$ s pulse minimum )	$I_{R1}$	10	$\mu$ A
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ C$ , 300 $\mu$ s pulse minimum )	$I_{R2}$	0.5	mA
<b>Reverse Recovery Time</b> ( $I_F = 0.5A$ , $I_R = 1.0A$ , $I_{RR} = 0.25A$ )	$t_{RR}$	150	nsec

<sup>1/</sup>  $T_A = 25^\circ C$ , Unless otherwise specified

### CASE OUTLINE: SPA516

